

# Ozark-Prairie News

July 1998

Society of Environmental Toxicology and Chemistry

## Notes from the Ozark Prairie SETAC President

*"...the presentations were very professional and attest to the quality of the student members of OP-SETAC."—Halbrook*

Greetings OP-SETAC members. Just a quick update to let you know a few happenings since the last newsletter. The joint chapters meeting with South Central held at Wichita State University during April 20 - 22, was very successful and interesting. The short course, "A Case Study of FIFRA Ecological Risk Assessment: How would you interpret the data?", presented by folks from the Bayer Corporation, was very informative and well attended. Our special thanks to Lisa Bowers and others from Bayer for all their work and a job well done. We are very fortunate to have Bayer as a corporate sponsor and appreciate all the support that they have provided to OP-SETAC.

I would again like to congratulate the first place winners of the platform (Sandi Arena, SIU) and poster (Bradley Knight, OSU) student competition. Congratulations also go to Mahes Rao (OSU), second place platform, and Chris Peterson (ISU) and Jennifer Anhalt (ISU) poster second and third respectively. As always the presentations were very professional and attest to the quality of the student members of OP-SETAC. In case you may not be aware, National SETAC awards a \$50.00 cash prize to the platform and poster student competition winners, which is in addition to the \$500.00 travel support provided by OP-SETAC for the student winners to attend the National SETAC meeting.

I encourage all of you to attend the National meeting in Charlotte, NC, during November 15-19, and to look for platform and posters presented by members of OP-SETAC. I also encourage you to attend the OP-SETAC Chapter meeting which I believe will be held from 7:00-8:00am on Monday, November 16th (great time for a meeting isn't it?).

You will see in this newsletter the nominations for new board members. Please send in your ballot as soon as possible, the new board members will be announced at the Chapter meeting in November and will begin serving their terms starting on January 1, 1999.

Dick Halbrook

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### "Web"sters!!

Visit the Ozark-Prairie homepage on the World Wide Web:

<http://wwwaux.ecrc.cr.usgs.gov/opsetac>

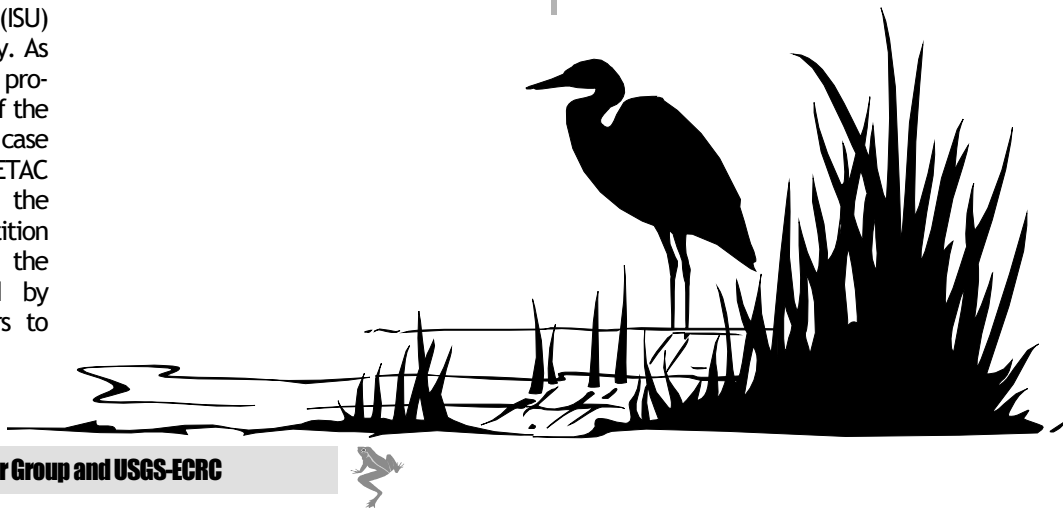
Interested in helping?  
Contact John Besser at  
<[John\\_Besser@usgs.gov](mailto:John_Besser@usgs.gov)>

### Reminder...

*Ozark-Prairie SETAC dues are \$10/year, and are due at the time of the annual meeting. If you did not register for the meeting this year, please send your dues to the new treasurer (make out checks to Ozark-Prairie SETAC):*

Sheryl Beauvais  
ECRC

4200 New Haven Road  
Columbia, MO 65201



# South Central and Ozark-Prairie Regional Chapters Meet in Wichita, Kansas

On April 20-22, the South-Central and Ozark-Prairie SETAC Chapters held the annual regional meeting at Wichita State University in Wichita, Kansas. This year's meeting was hosted by the Wichita State University SETAC Student Chapter. Spring weather welcomed approximately 80 individuals who participated in the three-day meeting.

The program started on Monday afternoon with a short course donated and planned by Bayer Corporation: *A Case study of FIFRA Ecological Risk Assessment: How would you interpret the data?* The course was taught by Dr. Val Clay, Dr. Tilghman Hall, Dr. Michael Dobbs, and Ms. Lisa Bowers. Later that day, barbecue and volleyball provided a great Monday evening meal and entertainment at the Raytheon Aircraft Employee's Club Lakes.

The meeting officially opened Tuesday morning with the Board and Chapter meetings. The remainder of the day was filled with 25 poster and platform presentations from Ozark-Prairie and South-Central participants. Kevin Reynolds of Texas Tech University won the South-Central Best Student Platform Award with his talk entitled, *"Accumulation of DDT and Mercury in Diets and Selected Tissues of Prothonotary Warblers (*Protonotaria citrea*) as Related to Foraging Dynamics on a Spatially Heterogeneous Contaminated Site in Alabama."* Platform runner-up awards went to Ben Holt of McNeese State University and Barry Forsythe of Wichita State University. Mark Pearson of Wichita State University won the Best Student Poster Award for his poster, *"Urban Water Quality: A Comparison of Land-use Effects."* Poster runner-up awards went to Jim Eisenhauer of Wichita State University and Peter Paulos of the University of Houston - Clear Lake. Barry Forsythe gave his award to Emilia Cruz-Li, a student platform presenter from Texas Tech University.

Sandi Arena of Southern Illinois University won the Ozark Prairie Best Student Platform Award with her talk

entitled, *"Predicting Starling Chick Carcass PCB Concentrations from PCB Concentrations in Ingested Animal Matter."* The Platform runner-up award went to Mahesh Rao of Oklahoma State University. Bradley Knight of Oklahoma State University won the Best Student Poster Award for his poster, *"Assessment of the Toxicity and bio-availability of Mixtures of Chlorophenols to *Eisenia fetida* in Soil."* Poster runner-up awards went to Chris Peterson and Jennifer Anhalt of Iowa State University.

The first place winners received \$500 toward travel expenses for attending the National SETAC meeting in November 1998. The second and third place winners won a student membership to National SETAC and the ET&C journal. The South Central second place winners also received the Bud Burk Award.

After a full day, the majority engaged in a local pub-crawl of Old Town on Tuesday night. Heroe's Sports Bar & Grill was the place to be for playing pool, foosball, and darts. The die-hards spent the remainder of the evening dancing the night away at a local club. All in all it was a great time to renew old friendships and make new ones.

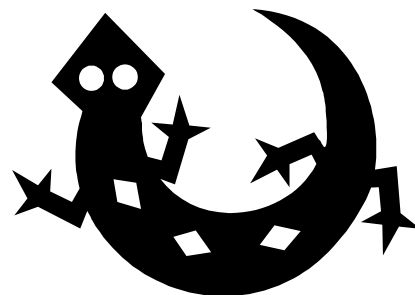
The theme of the meeting, "Water Quality Issues in Midwestern States" was explored Wednesday in the plenary session by six recognized experts in the field: Dr. S.J. Klaine: *Regional Water Quality Issues*, Dr. W.H. Clements: *Effects of Heavy Metals on Water Quality*, Ms. L. Nowell: *Development of Water Quality Standards*, Dr. J. Coats: *Effects of Pesticides on Water Quality*, Dr. Kyle Hoagland: *Effects of Pesticides and Nutrients on Biological Communities*, and Mr. T. Muir: *Effects of Stressors on Endangered and Threatened Species - Unionidae*.

A special thanks is owed to all of the meeting and travel award sponsors, the Ozark-Prairie Chapter, and the Wichita State University's SETAC Student Chapter for this year's meeting. The

South-Central 1998 Regional meeting sponsors were as follows: Espey, Huston, & Associates, Inc., EA Engineering, Science & Technology, Exxon Company, USA, ENTRIX, Inc., Stillmeadow, Inc., and Texaco. The Ozark-Prairie SETAC chapter contributors in 1998 were ABC Laboratories Inc., Bayer Corporation, Monsanto, Stover Group.

If you were unable to attend the meeting and would like an electronic copy of the abstract book, please contact Lisa Bowers at [Lisa.Bowers.b@Bayer.com](mailto:Lisa.Bowers.b@Bayer.com) via email.

Holly Teague





# Go To The Polls—Cast Your Vote—It Counts

Candidates for Ozark-Prairie Board of Directors

Three positions to be filled.

We have three highly motivated candidates!!

**Michelle Gray**  
Southern Illinois University

I graduated from the University of Illinois Urbana-Champaign with a Bachelor of Science degree in biology. While attending U of I, I had the opportunity to work in the research lab of Dr. David Wahl studying the behavior of two species of crayfish in the presence and absence of predators. After graduation, I worked as a field assistant studying the home range and movement patterns of the rare Blanding's Turtle. In April 1998 I began a Masters degree program with the Cooperative Wildlife Research Laboratory at Southern Illinois University. My research involves examining environmental contaminant exposure in starling chicks collected from remediated sites at Crab Orchard National Wildlife Refuge. In addition, I am evaluating the effects of various chemicals on endocrine disruption in avian species. My career goal is to gain the skills needed to perform research in the areas of environmental monitoring and analysis of contaminated environments.

**A. Tilghman Hall**  
Bayer Corporation

I have been employed by the Ecotoxicology Group of Bayer Corporation's Agricultural Division for approximately two years. I am an Aquatic Toxicologist with the group, with responsibilities for conducting studies, performing risk assessments, and representing Bayer in various industry task forces. Previously I worked with Sandoz Agro, Inc in Des Plaines, IL. I have been a member of SETAC for 10 years, and have been involved both regionally and nationally. I am currently on SETAC's Short Course Committee, with tenure ending in 1998. While at Miami University, I was the graduate student representative to the Board of Directors of the Ohio Valley Regional Chapter. I am interested in becoming a member of the Ozark Prairie Board of Directors because of the active role the Board takes in creating opportunities for the exchange of scientific ideas. I believe the Regional Chapters allow people to become acquainted with colleagues and advance the science of environmental toxicology and chemistry.

**Stephen L. Hicks**  
ABC Laboratories, Inc.

Graduated from the University of Missouri-Columbia with a B.S. Fisheries and Wildlife degree. Employed at ABC Laboratories, Inc. since 1989 as an aquatic toxicologist. At ABC Laboratories, serves as a study director for acute and chronic toxicity tests with *D. magna*, various fish species, and various algal species. Chemicals tested include agricultural and consumer product materials for product registration. Other duties at ABC Laboratories include training of new associates and serving as a program manager. As a program manager, the study progress and status for assigned clients are maintained and discussed with clients. Hobbies include those that are most common among individuals interested in the environment such as camping, canoeing, and fishing. Member of SETAC since 1994 and member of regional OP-SETAC. Served on the committee to host the OP-SETAC regional meeting in 1997 at Columbia, MO. Pursuing position on Ozark-Prairie Board to become more involved with the growth and evolution of OP-SETAC. Would like to see an increase in membership of college students by highlighting benefits obtained from membership such as 1) meeting peers with careers in their field of education, 2) learning of career opportunities, and 3) socializing at the regional meetings.

*...This is your ballot. Please fold, spindle, or mutilate...NOT... just turn it over, fill it in, and mail. There, see, you COULD do it. The whole thing was so painless, except for the 32¢ stamp, but then, it is such a small price to pay for such a great deed.*



Sheryl Beauvais  
USGS Biological Resources Division  
Environmental & Contaminants Research Center  
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**Vote for the candidates you want to serve on the OP-SETAC Board of Directors.  
Remove this page from the newsletter, fold, and mail.**

☐

Michelle Gray

☐

A. Tilghman Hall

☐

Stephen L. Hicks



## America's Most Endangered Rivers

American Rivers, a national conservation organization dedicated to protecting and restoring America's river systems and to fostering a river stewardship ethic, listed the Missouri River second in America's most endangered rivers for 1998; it was first on the list in 1997. Visit <[www.amrivers.org](http://www.amrivers.org)> for more information.

1. **Columbia River, Hanford Reach** (Washington)
2. **Missouri River** (Montana, North Dakota, South Dakota, Nebraska, Iowa, Kansas, Missouri)
3. **Pocomoke River** (Delaware, Maryland, Virginia)
4. **Kern River** (California)
5. **Blackfoot River** (Montana)
6. **Colorado River Delta** (Mexico: Baja California, Sonora)
7. **Chattahoochee River** (Georgia, Alabama, Florida)
8. **Lower Snake River** (Washington)
9. **Apple River** (Wisconsin, Illinois)
10. **Pinto Creek** (Arizona)
11. **Wolf River** (Wisconsin)
12. **Potomac River** (West Virginia, Pennsylvania, Maryland, Virginia, District of Columbia)
13. **Rogue/Illinois River System** (including Elk Creek and Rough & Ready Creek) (Oregon)
14. **Taku River** (British Columbia, Alaska)
15. **Crooked Creek** (Arkansas)
16. **Passaic River** (New Jersey)
17. **Mattaponi River** (Virginia)
18. **Walla Walla River** (Oregon, Washington)
19. **Uinta River** (Utah)
20. **Kansas River** (Kansas)



*The Missouri River basin drains one-sixth of the land mass of the contiguous United States, a large portion of the Ozark-Prairie region.*

## OP-SETAC Board Minutes April 21, 1998 Meeting

Present: Ellen Arthur, John Besser, Sheryl Beauvais, Lisa Bowers, Richard Halbrook, Don Huggins  
Absent: Joel Coats, Bill McAllister, Becky Malloy, Marcia Nelson

1. Previous minutes were accepted with one correction. Dr. Ellen Kruger is now Dr. Ellen Arthur.

2. Nominations for Board Members are in progress. Sheryl Beauvais, Steve Hicks and Jennifer Anhalt are on the list to run for the board. It would be nice to get some more representatives from the OP-SETAC student members. Dick Halbrook asked again for volunteers among the outgoing board members to run again. We are attempting to get back to a rotation that limits the outgoing members to 3 or less each year. Lisa Bowers may run again depending upon how many nominations we get from industry people. Since Ellen has accepted a position with Bayer Corp., it may be best to let Lisa's term expire. Please send any nominations to Dick Halbrook at SIU in Carbondale or John Besser at ECRC in Columbia. Election ballots will be sent out in the next newsletter and board members will be announced by the National SETAC meeting.

3. John Besser reported on the meeting t-shirt project. The t-shirts were paid for by OP-SETAC and South Central. The total cost for 100 shirts was \$628.00 - half of this price will be paid by South Central. They will keep half of the shirts at the end of the meeting. Shirts will be sold for \$10.00. They are very nice. Two colors are available: yellow or blue.

4. It was agreed that we should never plan another OP-SETAC regional meeting for April. It was a worthwhile experiment, but it failed. As you may recall, the April format was approved due to an urgent request from South Central and a requirement from Wichita State Univ. We had very low OP-SETAC attendance compared to past years. Also, we will return to the tradition of having the meeting start on Thursday and end on Saturday.

5. It is important to have a financial incentive for early registration. This will be particularly true at the 1999 meeting in Carbondale. The site of our meeting is Giant City Park - a very beautiful

location. In order to get a cabin, reservations should be made in January or February. For those members that can't make a decision quite so early, there are motels in town. Motels are only about 10 miles away, but the cabins would probably be preferred by all attendees. Contact Dick Halbrook for brochures and more info.

The theme of the meeting will revolve around remediation efforts and how to decide when a site is "clean" and remediation efforts are "complete enough." Senator Paul Simon will be the keynote speaker. Visits will be planned to the Crab Orchard Superfund site.

Socials will be held at Giant City Park and will include great food, volleyball, and live music. A folk music group called, "For Healing Purposes Only" is booked to appear. Dick brought pictures and everyone agreed it looks like a wonderful place for an OP-SETAC regional meeting.

6. The OP-SETAC website is up and running. Please contact John Besser with suggestions for how we can use this site. It was suggested that we try to keep a bulletin board feature that would include job openings, meeting notices, pictures, info on OP-SETAC activities and meetings, requests for officers and board members, etc. John Besser is open to suggestions. The address is in the newsletter.

7. The most recent cost estimate for the Wichita Regional meeting was \$300 to come from OP-SETAC's treasury. More information will be available soon.

8. The treasurer, John Besser, reported that we are in good financial shape. Sheryl Beauvais will be taking over the treasurer duties when John takes over as President.

9. All board members agreed that the OP-SETAC newsletter was excellent and was an outstanding improvement over previous issues. Thanks go out to Sheryl Beauvais and Marcia Nelson. Keep up the good work!

*Lisa Bowers—May 1, 1998*



## **The Natural Connection: Environmental Integrity and Human Health**

### **SETAC 19th Annual Meeting**

*15 - 19 November 1998—  
Charlotte Convention Center,  
Charlotte, North Carolina*

The SETAC 19th Annual Meeting will focus on the connections between environmental and human health risks, with broad discussions about exposure to degraded or deleterious environmental conditions via diet, water, air, or contaminated ecosystems. The plenary sessions will provide an exciting beginning to the technical program, and special symposia throughout the meeting will further serve to illuminate this theme.

In keeping with the meeting theme, session topics are being developed to consider the following: Contaminant - Disease Interactions; Foodchain Transfer of Contaminants to Humans; Science, Policy, and Publicity Associated with Pfiesteria, Animal Wastes, and Non-Point Source Pollution; Contaminant Flux from Sediments or Soils; Bioavailability; Pulp and Paper Industry Issues; Endocrine Disruptors; and Revisiting Water Quality Criteria for Metals. These highlighted session topics will be complemented by technical sessions in Environmental Chemistry, Environmental Toxicology, Regional Issues, Environmental Management and Policy, and Hazard/Risk Assessment. The entire program is expected to attract more than 1,800 abstracts that will be distributed among the sessions as poster or platform presentations. Continuing the SETAC tradition, a wide variety of short courses will be offered, each providing critical "hands-on" expertise in advancing fields of research or policy. And, notably, the Charlotte Convention Center has tremendous facilities for commercial exhibits, offering SETAC members a perfect venue to see the latest in publications, software, products, and services in the environmental sciences.

## **Modeling and Measuring the Vulnerability of Ecosystems at Regional Scales for Use in Ecological Risk Assessment and Risk Management**

*August 17 - 20, 1998 Bell Harbor International Conference Center Seattle, Washington*

Among the many issues that environmental risk assessors and risk managers must face is the need to evaluate the status of the environment at an ecosystem level. Investigators must consider what are appropriate questions and experimental designs for different assessment scales. There are several reasons for this, such as:

Data are often at multiple levels of biological organization, or at single sub-ecosystem levels at discrete regions within the ecosystem.

Data at the ecosystem level, by nature of the scale, are often aggregated and tend to have less detail. This can be problematic when evaluating impacts or exposure.

Models tend to address specific factors (e.g., exposure models vs. effects), media (water vs. land) and geography (local vs. regional).

To explore these and related issues, a symposium co-sponsored by SETAC, ASTM, and USEPA has been developed to bring together people to present approaches to the problem and available supporting data. This symposium will allow attendees to discuss the problems and potential solutions to integration of data and models across scales, levels of organization, and multiple stressors for the purpose of improving ecological risk assessment and management practices.

The main points we hope will be addressed include:

Monitoring research focused on development of indicators at various levels of biological organization for multiscale monitoring and ecosystem evaluation.

The development and validation of models focused on improving first-principle exposure and effect models, coupling and scaling of effects and exposure models, and development of a common modeling framework to improve integration of models.

Risk assessment research focused on novel approaches to integrating landscape, exposure, and effects.

Risk management and communication issues regarding watershed and larger scale pollution issues.

For more information contact: SETAC, 1010 North 12th Avenue, Pensacola, FL 32501-3367. (850) 469 1500; FAX 850 469 9778; setac@setac.org; <http://www.setac.org>

### **Environmental Contaminants and Terrestrial Vertebrate Effects on Populations, Communities, and Ecosystems.**

*October 19 - 21, 1998—College Park, MD. Sponsored by The Society of Environmental Toxicology and Chemistry and the Patuxent Wildlife Research Center. External funding provided by the U.S. EPA. The call for papers has been issued. For more information, contact: Peter Albers, Patuxent Wildlife Research Center, 12011 Beech Forest Road, Laurel, Maryland, 20708-4041, USA. (F 301 497 5675; [pete\\_albers@usgs.gov](mailto:pete_albers@usgs.gov)).*





# Job Announcements

**Risk Assessor.** Maxim Technologies, Inc., a national leader in engineering and environmental consulting, has an opening for a Risk Assessor in our St. Louis location.

This position will coordinate and perform human health and ecological risk assessments. Requires working with and coordinating multidisciplinary teams in preparation of risk assessments for a broad variety of remedial investigations and other environmental studies.

Ideal candidates are required to have an in-depth familiarity with the procedures and requirements of RAGS as well as 5+ years of experience in the preparation of risk assessments. BS/MS in toxicology, biology, environmental science or environmental engineering is also required. Must be proficient with written and verbal communications of technical material.

We offer a competitive salary and benefits package. Please fax resume with salary requirements to Attn: MG at (314) 426-4212 or send to Maxim Technologies, Inc., 1908 Innerbelt Business Center Drive, St. Louis, MO 63114-5700 EOE Email address: skinkade.dallas@maximmail.com. (Posted 11 June 1998)

## Graduate Research Assistant / Research Associate

*Research Associate* to manage an urban storm water runoff project and conduct bioavailability research. Qualifications should include M.S. or Ph.D. with a strong background in Environmental Toxicology. Experience with GC and other analytical techniques is desired. Position open July 15, 1998. Send letter of application, C.V. and three letters of recommendation to: Dr. Michael Lydy, Department of Biological Sciences, Wichita State University, 1845 N. Fairmount, Wichita KS 67260-0026. AA / EOE. Application materials should be received by July 8 or until filled.

*Graduate Research Assistant* starting Summer or Fall 1998 to help conduct an urban storm water runoff project. Prospective students can either enroll in our M.S. program in Biological Sciences or Environmental Science. This 50% Graduate Research Assistantship is supported with an annual stipend of \$12,000 and is available on a competitive basis. For further information and application materials contact Dr. Michael Lydy, Department of Biological Sciences, 1845 N. Fairmount, Wichita KS 67260-0026. AA /EOE. Application materials should be received by July 15 or until filled.

**Aquatic Toxicologist.** Position Location: U.S. Geological Survey, Biological Resources Division, Environmental and Contaminants Research Center, Columbia, MO

Responsibilities: participate in the design, implementation, analysis, interpretation, and reporting of field and mesocosm studies designed to assess the performance of selected biomarkers as part of a suite of indicators under development for environmental monitoring.

Qualifications: Ph.D. or equivalent in aquatic toxicology, ecology, fishery biology, or related discipline; and demonstrated technical writing and communication skills as evidenced by refereed publications and presentations at scientific meetings.

Other: The position will be offered and managed at the level of Subject Matter Specialist II through Johnson Controls, Inc. an on-site contractor, and includes a competitive salary and benefits.

Closing Date: August 7, 1998

Contact: Gerry Horak, Johnson Controls, Inc., P.O. Box 270308, Fort Collins, CO 80527; e-mail gerry\_horak@usgs.gov (Posted 13 July 1998)

## Newest Publication from SETAC Europe

### Endocrine Modulators and Wildlife: Assessment and Testing

*The state-of-the-art, comprehensive and authoritative position on hazard identification of endocrine modulators in wildlife.*

Covering the priority issue of endocrine modulators: how to test contaminants for potential endocrine effects and how to evaluate the test results? The information in this book is important to regulators and industry who both have to deal with the assessment of new and existing chemicals. This publication is the first to provide specific recommendations. It also identifies the research that is still needed in the near future. Academicians, regulators and industry will benefit from considering and implementing the recommendations of the workshop participants.

The book assimilates the expertise of some 50 experts from 8 European countries, the USA and Canada. Together, they constituted probably the largest pool knowledge on this subject, which they contributed during a 4-day workshop. This publication represents the consensus of the participants.

**Endocrine Modulators and Wildlife** presents recommendations for:

- in vivo screening, subchronic and chronic testing of mammals, birds and fish;
- monitoring of point source discharges for effects on the endocrine system;
- in vitro test method optimization and validation;
- development of Structure Activity Relationships within the next three years; and,
- a strategy for hazard identification.

The recommendations resulting from the workshop and reported in this book will be used - amongst others - by the National Coordinators of the OECD Test Guidelines Program to develop Test Guidelines suitable for the identification of endocrine modulating chemicals. Hence, this book provides early information useful to scientists in academia, government and industry.





**Marcia Nelson or Sheryl Beauvais**  
**USGS Biological Resources Division**  
**Environmental & Contaminants Research Center**  
**4200 New Haven Road**  
**Columbia, MO 65201**

#### **Ozark-Prairie SETAC News**

### **Ozark-Prairie Chapter Board of Directors Society of Environmental Toxicology and Chemistry**

President Richard Halbrook, '00  
Vice President John Besser, '01  
Secretary Becky Powell Malloy, '99  
Treasurer/Editor Sheryl Beauvais, '99  
Ex-Officio Lisa Bowers, '99  
Editor Marcia Nelson, '01  
Ellen Arthur, '01  
Joel Coats, '99  
Donald Huggins, '99  
Bill McAllister, '99

#### **Membership**

Any interested person is welcome to join Ozark-Prairie SETAC. Although membership with national SETAC is encouraged, it is not required for Chapter membership.

